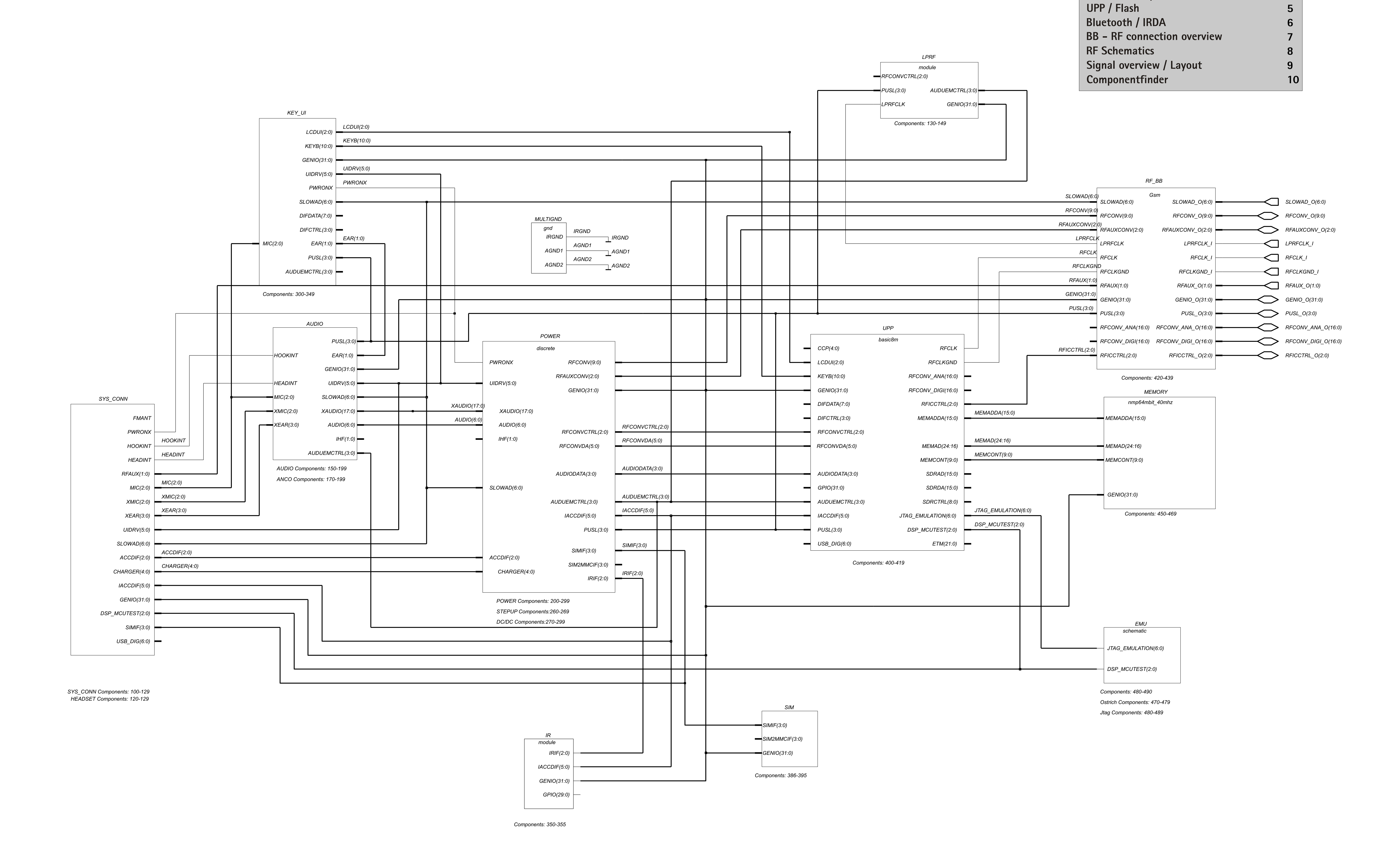
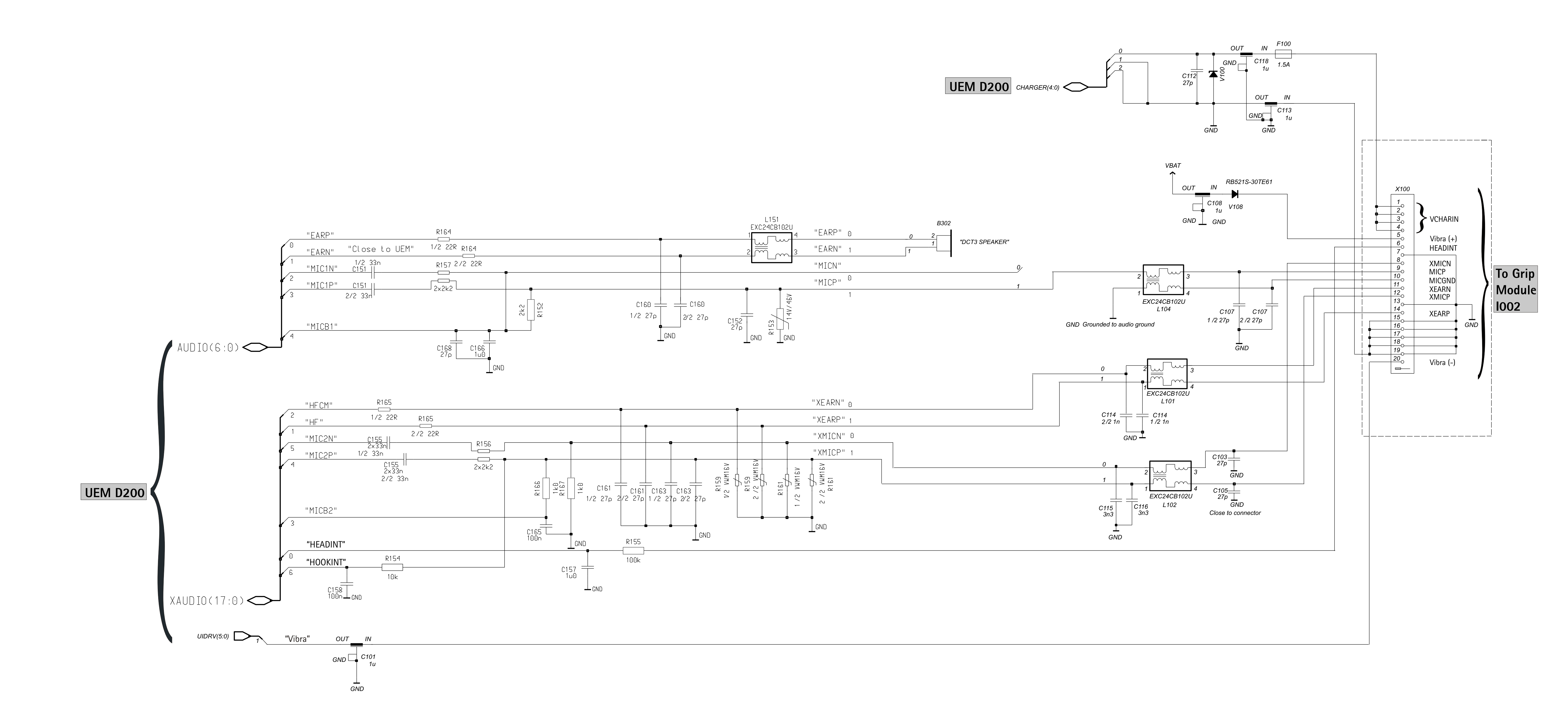
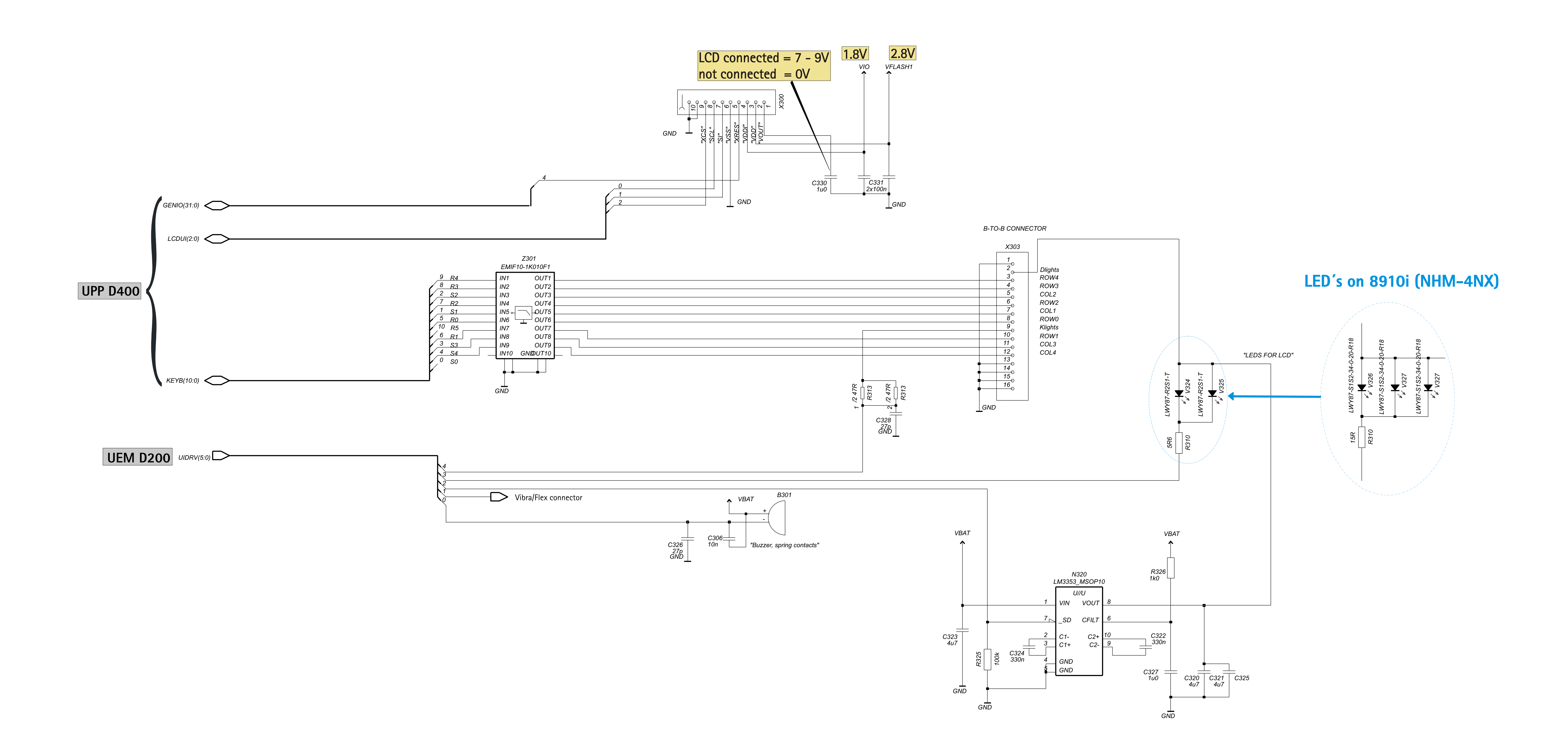
NOKIA	CONFIDENTIAL		1(10)
Customer Care Europe & Africa	DCT4 Common Baseband Schematic	Version 4.0 Approved	
SCCE Training Group	NHM-4 (8910) & NHM-4NX (8910i)	(PCB) Version la4_20a	
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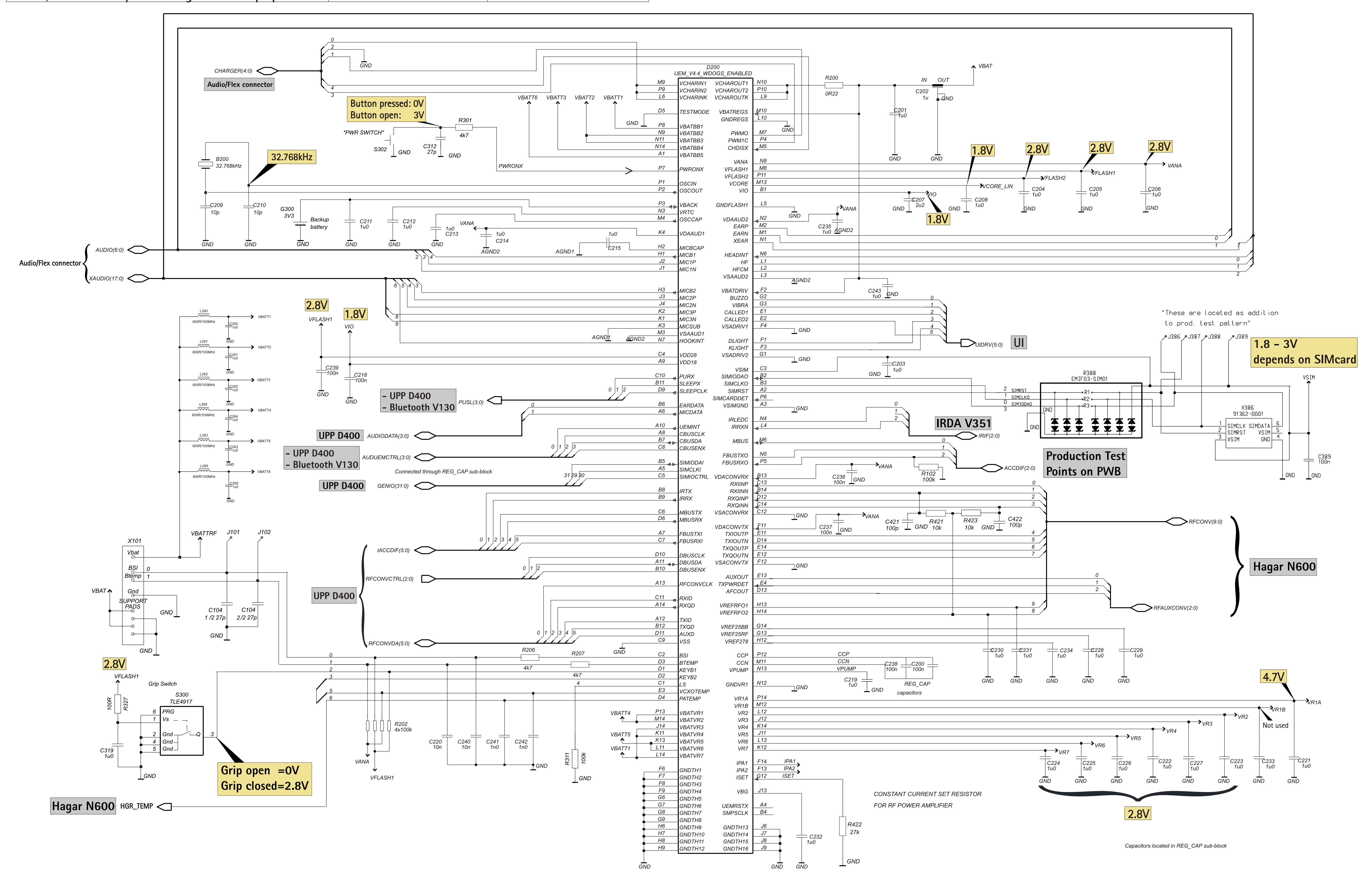
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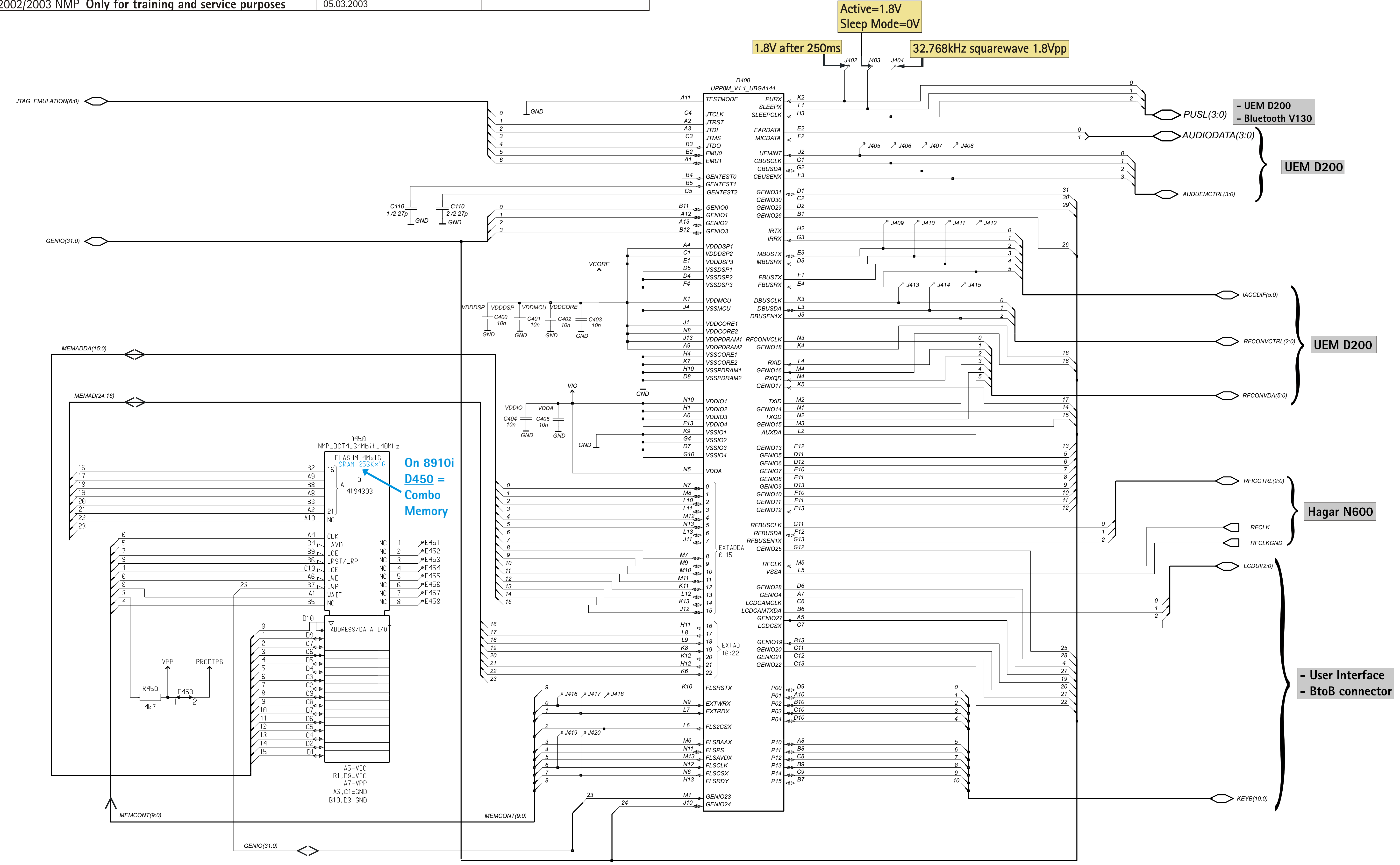


UEM D200
CHARGER(4:0)
UEM D200
AUDIO(6:0)
XAUDIO(17:0)
UIDRV(5:0)
"Vibra"
"EARP"
"EARN"
"Close to UEM"
"MIC1N"
"MIC1P"
"MICB1"
"HFCM"
"HF"
"MIC2N"
"MIC2P"
"MICB2"
"HEADINT"
"HOOKINT"
"XEARN"
"XEARP"
"XMICN"
"XMICP"
"DCT3 SPEAKER"
B302
L151
EXC24CB102U
L104
L101
L102
GND Grounded to audio ground
Close to connector
VBAT
RB521S-30TE61
V108
F100
1.5A
V100
X100
VCHARIN
Vibra (+)
HEADINT
XMICN
MICP
MICGND
XEARN
XMICP
XEARP
Vibra (-)
To Grip Module I002

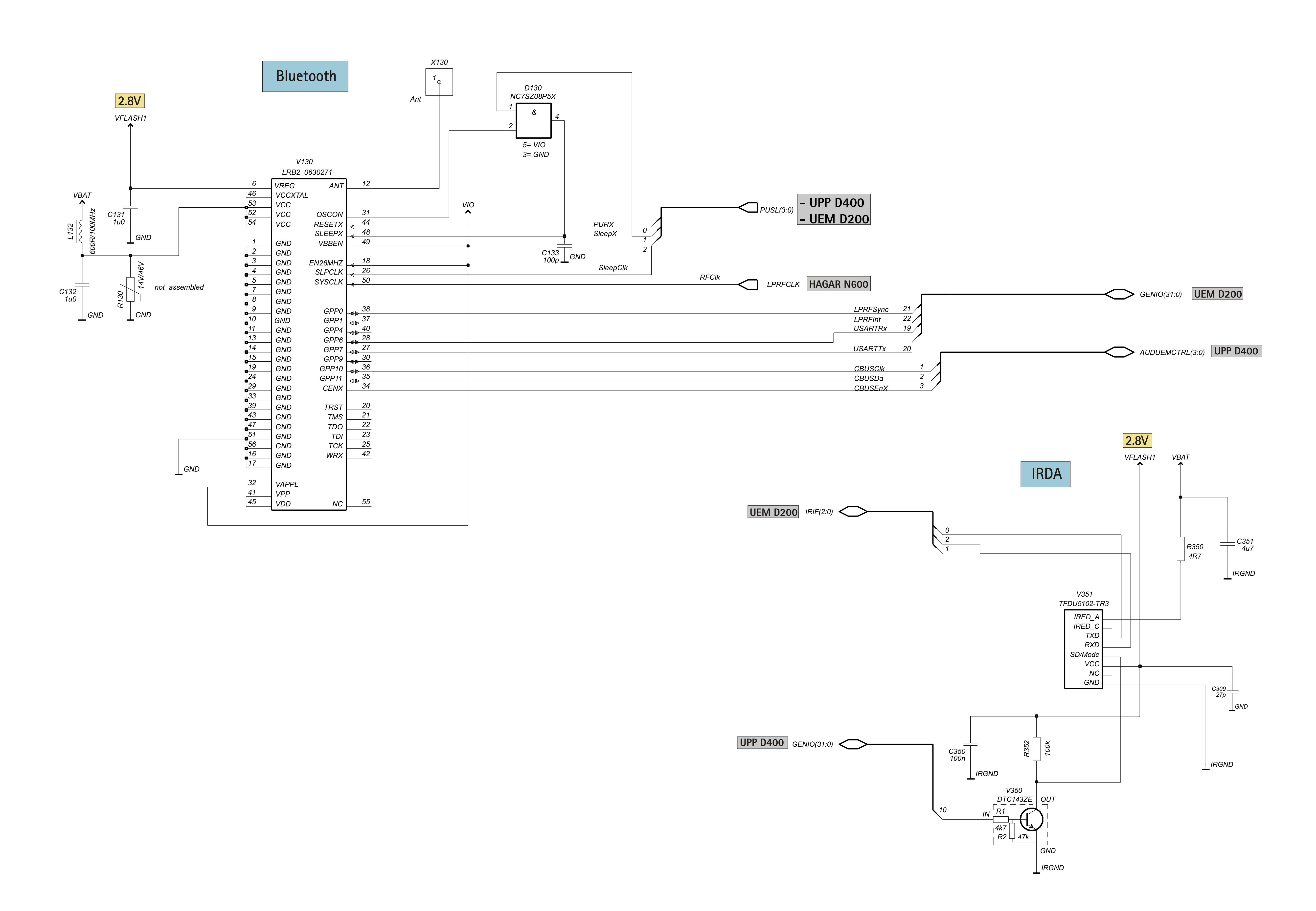

LCD connected = 7 - 9V
not connected = 0V
1.8V
2.8V
VIO
VFLASH1
X300
GND
C330 1u0
C331 2x100n
GENIO(31:0)
LCDUI(2:0)
KEYB(10:0)
UPP D400
Z301
EMIF10-1K010F1
B-TO-B CONNECTOR
X303
Dlights
ROW4
ROW3
COL2
ROW2
COL1
ROW0
Klights
ROW1
COL3
COL4
LED´s on 8910i (NHM-4NX)
"LEDS FOR LCD"
UEM D200
UIDRV(5:0)
Vibra/Flex connector
VBAT
B301
C326 27p
C306 10n
"Buzzer, spring contacts"
N320
LM3353_MSOP10
R326 1k0
C323 4u7
R325 100k
C324 330n
C322 330n
C327 1u0
C320 4u7
C321 4u7
C325



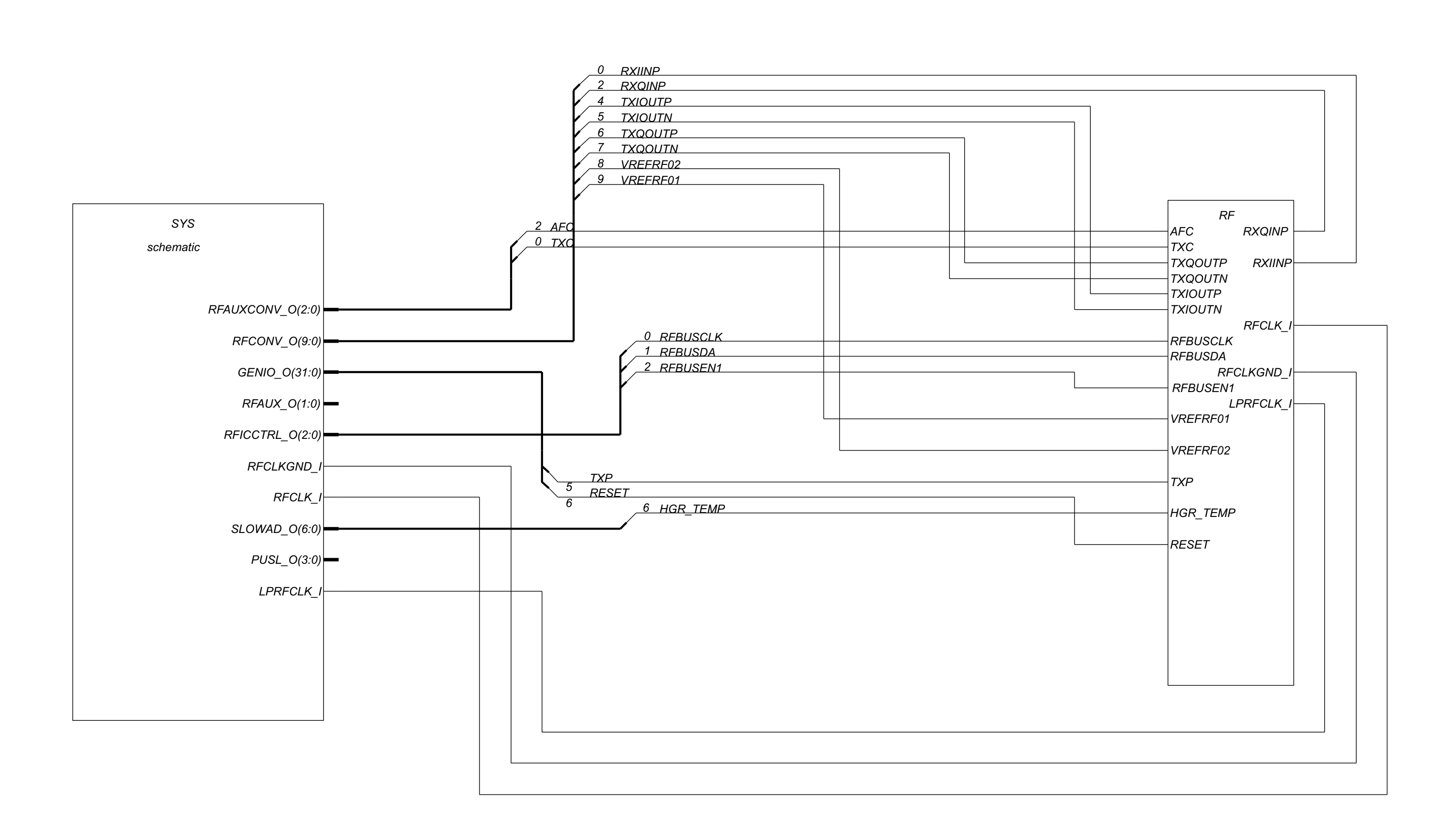
D200
UEM_V4.4_WDOGS_ENABLED
Audio/Flex connector
CHARGER(4:0)
Button pressed: 0V
Button open: 3V
"PWR SWITCH"
S302
R301 4k7
C312 27p
32.768kHz
B200 32.768kHz
G300 3V3
Backup battery
AUDIO(6:0)
XAUDIO(17:0)
1.8V
2.8V
UI
UIDRV(5:0)
"These are located as addition to prod. test pattern"
1.8 – 3V depends on SIMcard
R388 EMIF03-SIM01
X386 91362-0001
IRDA V351
IRIF(2:0)
Production Test Points on PWB
ACCDIF(2:0)
- UPP D400
- Bluetooth V130
PUSL(3:0)
UPP D400
AUDIODATA(3:0)
AUDUEMCTRL(3:0)
Connected through REG_CAP sub-block
GENIO(31:0)
IACCDIF(5:0)
RFCONVCTRL(2:0)
RFCONVDA(5:0)
RFCONV(9:0)
RFAUXCONV(2:0)
Hagar N600
HGR_TEMP
X101
VBATTRF
J101
J102
C104 1/2 27p
C104 2/2 27p
SUPPORT PADS
Grip Switch
S300 TLE4917
Grip open =0V
Grip closed=2.8V
R202 4x100k
R311 100k
4.7V
Not used
CONSTANT CURRENT SET RESISTOR FOR RF POWER AMPLIFIER
R422 27k
Capacitors located in REG_CAP sub-block

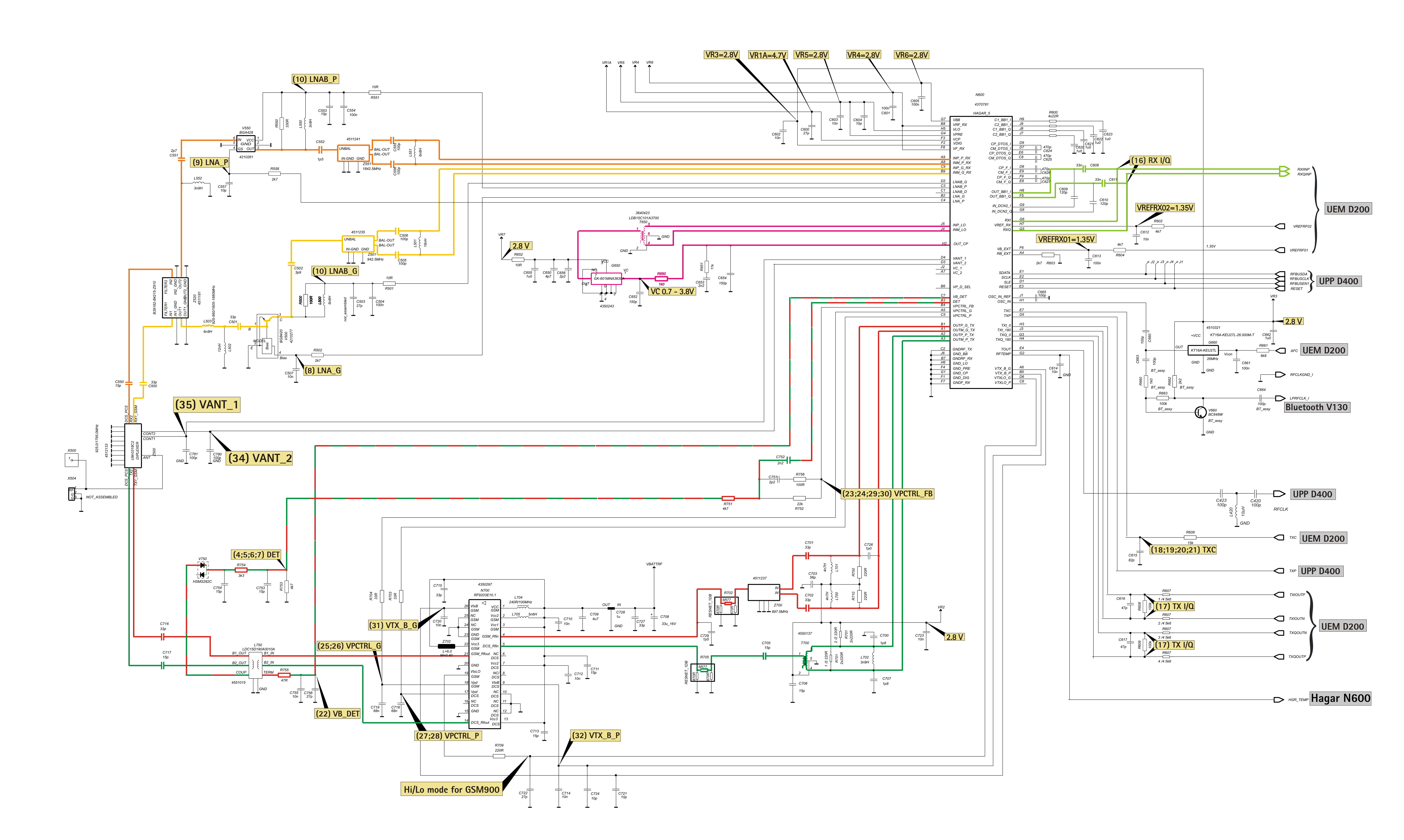


Active=1.8V
Sleep Mode=0V
1.8V after 250ms
32.768kHz squarewave 1.8Vpp
D400
UPP8M_V1.1_UBGA144
JTAG_EMULATION(6:0)
GENIO(31:0)
PUSL(3:0)
- UEM D200
- Bluetooth V130
AUDIODATA(3:0)
UEM D200
AUDUEMCTRL(3:0)
IACCDIF(5:0)
RFCONVCTRL(2:0)
UEM D200
RFCONVDA(5:0)
RFICCTRL(2:0)
RFCLK
RFCLKGND
Hagar N600
LCDUI(2:0)
KEYB(10:0)
- User Interface
- BtoB connector
MEMADDA(15:0)
MEMAD(24:16)
D450
NMP_DCT4_64Mbit_40MHz
FLASHM 4Mx16
SRAM 256Kx16
On 8910i
D450 =
Combo
Memory
VCORE
VIO
VPP
PRODTP6
R450
4k7
MEMCONT(9:0)

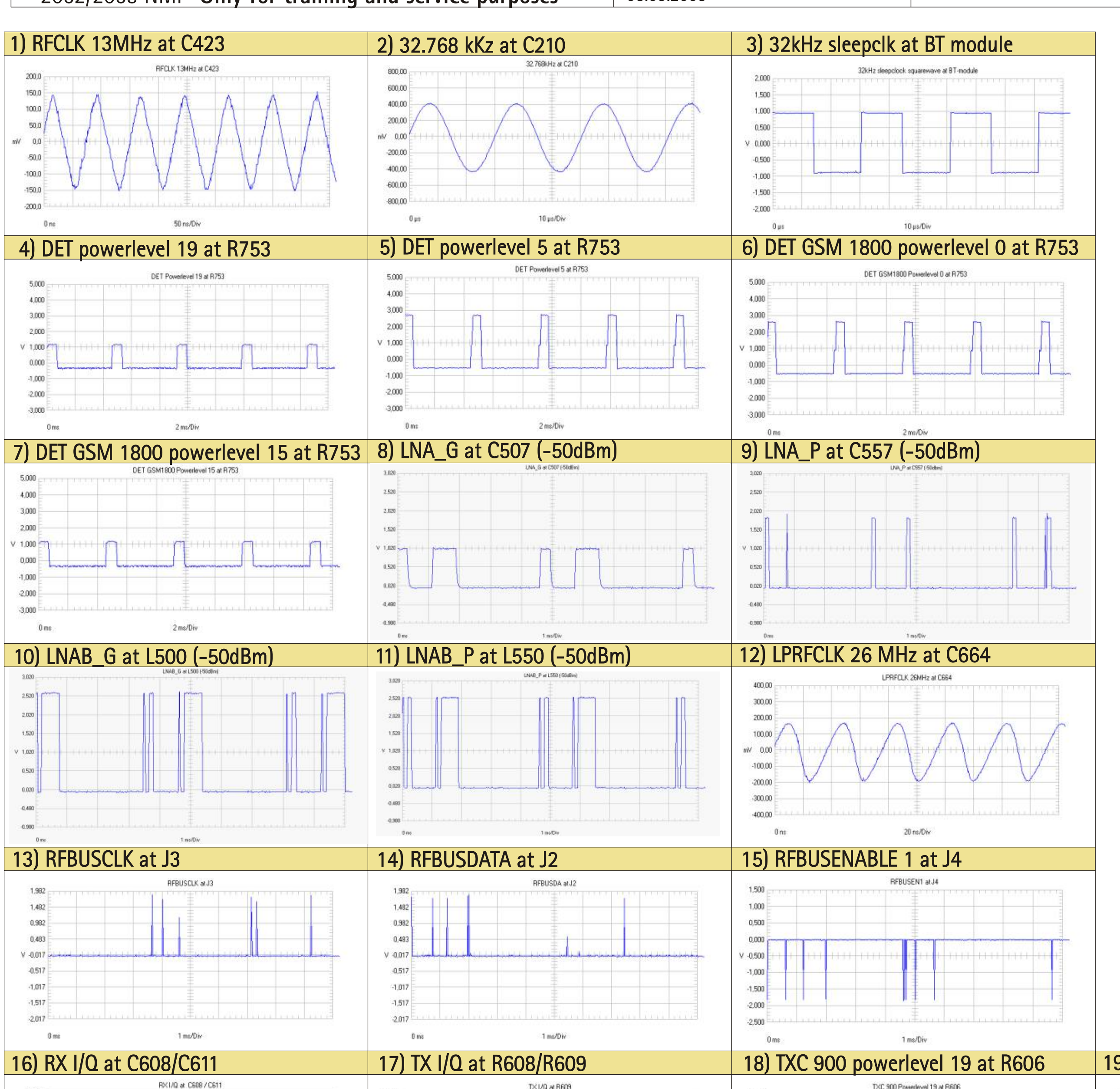


Bluetooth
2.8V
VFLASH1
VBAT
X130
Ant
D130
NC7SZ08P5X
5= VIO
3= GND
V130
LRB2_0630271
VREG
VCCXTAL
VCC
GND
ANT
OSCON
RESETX
SLEEPX
VBBEN
EN26MHZ
SLPCLK
SYSCLK
GPP0
GPP1
GPP4
GPP6
GPP7
GPP9
GPP10
GPP11
CENX
TRST
TMS
TDO
TDI
TCK
WRX
VAPPL
VPP
VDD
NC
VIO
C131
1u0
C132
1u0
L132
600R/100MHz
R130
14V/46V
not_assembled
C133
100p
PURX
SleepX
SleepClk
RFClk
PUSL(3:0)
- UPP D400
- UEM D200
LPRFCLK
HAGAR N600
GENIO(31:0)
UEM D200
LPRFSync
LPRFInt
USARTRx
USARTTx
AUDUEMCTRL(3:0)
UPP D400
CBUSClk
CBUSDa
CBUSEnX
IRDA
IRIF(2:0)
R350
4R7
C351
4u7
IRGND
V351
TFDU5102-TR3
IRED_A
IRED_C
TXD
RXD
SD/Mode
VCC
NC
C309
27p
C350
100n
R352
100k
V350
DTC143ZE
OUT
IN
R1
4k7
R2
47k


SYS
schematic
RFAUXCONV_O(2:0)
RFCONV_O(9:0)
GENIO_O(31:0)
RFAUX_O(1:0)
RFICCTRL_O(2:0)
RFCLKGND_I
RFCLK_I
SLOWAD_O(6:0)
PUSL_O(3:0)
LPRFCLK_I
0 RXIINP
2 RXQINP
4 TXIOUTP
5 TXIOUTN
6 TXQOUTP
7 TXQOUTN
8 VREFRF02
9 VREFRF01
2 AFC
0 TXC
0 RFBUSCLK
1 RFBUSDA
2 RFBUSEN1
TXP
5 RESET
6
6 HGR_TEMP
RF
AFC
TXC
TXQOUTP
TXQOUTN
TXIOUTP
TXIOUTN
RXQINP
RXIINP
RFCLK_I
RFBUSCLK
RFBUSDA
RFCLKGND_I
RFBUSEN1
LPRFCLK_I
VREFRF01
VREFRF02
TXP
HGR_TEMP
RESET



VR3=2.8V
VR1A=4.7V
VR5=2.8V
VR4=2.8V
VR6=2.8V
(10) LNAB_P
(9) LNA_P
(16) RX I/Q
UEM D200
VREFRX02=1.35V
2.8 V
VREFRX01=1.35V
UPP D400
(10) LNAB_G
VC 0.7 - 3.8V
(8) LNA_G
2.8 V
UEM D200
(35) VANT_1
Bluetooth V130
(34) VANT_2
(23;24;29;30) VPCTRL_FB
UPP D400
UEM D200
(18;19;20;21) TXC
(4;5;6;7) DET
UPP D400
(17) TX I/Q
UEM D200
(31) VTX_B_G
(17) TX I/Q
2.8 V
(25;26) VPCTRL_G
(22) VB_DET
Hagar N600
(27;28) VPCTRL_P
(32) VTX_B_P
Hi/Lo mode for GSM900



2.8 V
Hall sensor
J403 SLEEPX=1.8 V
Grip open =0V
Grip closed =2.8V
VR6=2.8 V
VR7=2.8 V
VR5=2.8 V
VR3=2.8 V
VR4=1.8V
VR2=2.8 V
VR1B=2.8 V
VR1A=4.7 V
VANA=2.8 V
VCORE=1.8 V
VIO=1.8 V
VFlash1=2.8 V
Hagar Reset = 1.8 V
J4 J2 J1 J3
Flash=2.8V
VIO=1.8V
7-9V when LCD is connected
VREFRF02= 1.35V
VREFRF01= 1.35V
AFC
VANT_1
VANT_2
VR2=2.8V
VR3=2.8V
BSI
BTEMP
VC=0.7-3.8 V
PURX=1.8V
VSIM= 1.8/3.0 V
3 SleepCLK

16) RX I/Q at C608/C611

17) TX I/Q at R608/R609

18) TXC 900 powerlevel 19 at R606

19) TXC 900 powerlevel 5 at R606

20) TXC 1800 powerlevel 0 at R606

21) TXC 1800 powerlevel 15 at R606

22) VB_DET at R755

23) VCTRL_FB 1800 powerlevel 0 at R756

24) VPCTRL_FB 900 powerlevel 5 at R756

25) VPCTRL_G powerlevel 19 at R704

26) VPCTRL_G powerlevel 5 at R704

27) VPCTRL_P powerlevel 0 at R718

28) VPCTRL_P powerlevel 15 at R718

29) VPCTRL_FB powerlevel 5 at R756

30) VPCTRL_FB 900 powerlevel 19 at R756

31) VTX_B_G at C721

32) VTX_B_P at C714

33) VTXlo_G at R709

34) VANT_2

35) VANT_1

 | 05.03.2003

B	C218 - F6	C350 - A7	C616 - D3	C726 - C3	L702 - C3	R600 - D3	V750 - B3
B200 - H5	C219 - H6	C351 - B5	C617 - D3	C727 - B3	L704 - A1	R602 - D3	X
C	C220 - F5	C389 - F5	C620 - D4	C728 - B2	L705 - A1	R603 - C3	X100 - G3
C101 - G3	C221 - H6	C400 - E5	C621 - D4	C729 - B1	L750 - B3	R604 - D3	X101 - G2
C103 - G3	C222 - G6	C401 - F5	C622 - D4	C751 - C2	N	R606 - D4	X130 - B1
C104 - G2	C223 - G6	C402 - F6	C623 - D4	C752 - D3	N320 - H7	R607 - D3	X131 - B1
C105 - G4	C224 - G6	C403 - F6	C624 - D4	C753 - B3	N600 - D3	R608 - D3	X300 - B4
C107 - G4	C225 - H6	C404 - F6	C625 - D4	C754 - B3	N700 - B2	R609 - D3	X303 - E7
C108 - G3	C226 - G6	C405 - F6	C626 - D3	C755 - B3	R	R650 - E2	X386 - F2
C110 - E4	C227 - G6	C406 - F5	C627 - D3	C756 - B3	R102 - H5	R651 - E3	X500 - A4
C112 - H5	C228 - F6	C420 - D3	C650 - E3	C780 - A3	R152 - G4	R652 - E3	X501 - A3
C113 - G1	C229 - G6	C421 - F6	C652 - E2	C781 - A3	R153 - G5	R660 - E3	X505 - A5
C114 - G5	C230 - G6	C422 - F6	C653 - E3	C790 - B1	R154 - F4	R661 - E4	Z
C115 - F4	C231 - G6	C423 - F6	C654 - E3	D	R155 - H5	R662 - E3	Z301 - E6
C116 - F5	C232 - G6	C450 - G7	C655 - E3	D130 - F7	R156 - G4	R663 - E4	Z500 - A3
C118 - G2	C233 - H6	C451 - G7	C656 - E3	D200 - G5	R157 - G5	R700 - C2	Z501 - C4
C131 - B1	C234 - F6	C454 - G6	C660 - D3	D400 - F5	R159 - F4	R701 - C3	Z520 - B3
C132 - E7	C235 - H4	C500 - B3	C661 - E4	D450 - G7	R161 - G4	R702 - A1	Z551 - C3
C133 - F7	C236 - F6	C501 - B4	C662 - E3	F	R164 - E4	R703 - B3	Z700 - C3
C151 - G5	C237 - F6	C502 - B3	C663 - E3	F100 - G2	R165 - G5	R704 - B3	
C152 - G4	C238 - H6	C504 - B4	C664 - E3	G	R166 - F5	R705 - B1	
C155 - G4	C239 - F5	C505 - C4	C665 - D3	G300 - G1	R167 - F5	R709 - A3	
C157 - H5	C240 - F5	C506 - C4	C700 - C3	G650 - E3	R200 - H5	R710 - C3	
C158 - H5	C241 - F5	C507 - B4	C701 - C2	G660 - E3	R202 - F6	R751 - B3	
C160 - B5	C242 - F5	C550 - B3	C702 - C3	L	R206 - F5	R752 - D3	
C161 - G5	C243 - H5	C551 - B3	C703 - C3	L101 - F4	R207 - F5	R753 - B3	
C163 - F4	C260 - H6	C552 - B3	C705 - B1	L102 - G4	R301 - A1	R754 - B3	
C165 - F5	C261 - H6	C553 - B3	C706 - C3	L104 - G4	R310 - F5	R755 - B3	
C166 - G5	C262 - H6	C554 - B3	C707 - C3	L132 - E7	R311 - G1	R756 - D3	
C168 - G5	C263 - H6	C555 - C3	C708 - G3	L151 - A5	R313 - F7	S	
C200 - H6	C264 - H6	C556 - C3	C709 - B2	L260 - H6	R325 - H7	S300 - H7	
C201 - H5	C265 - H5	C557 - B3	C710 - A1	L261 - H6	R326 - H7	S302 - A1	
C202 - H6	C306 - A6	C600 - D3	C711 - B1	L262 - H6	R327 - H7	T	
C203 - F5	C309 - A7	C601 - C3	C712 - B1	L263 - H6	R350 - A5	T650 - D3	
C204 - H5	C312 - A1	C602 - D3	C713 - B2	L264 - H6	R352 - E5	T700 - C3	
C205 - H5	C319 - H7	C603 - D3	C714 - B2	L265 - H6	R388 - F5	V	
C206 - H5	C320 - H6	C604 - D3	C715 - A2	L420 - F6	R421 - F6	V100 - G2	
C207 - F5	C321 - H6	C605 - D3	C716 - B3	L500 - B3	R422 - G6	V108 - G3	
C208 - H6	C322 - H7	C608 - D3	C717 - B3	L501 - C3	R423 - F6	V130 - D2	
C209 - H5	C323 - H7	C609 - D3	C718 - B3	L502 - B4	R450 - F6	V324 - B5	
C210 - H5	C324 - G7	C610 - D3	C719 - B3	L503 - B4	R500 - B3	V325 - B7	
C211 - H5	C326 - A6	C611 - D3	C720 - A2	L550 - B3	R501 - B4	V350 - E5	
C212 - H5	C327 - H6	C612 - D3	C721 - A2	L551 - C3	R502 - B4	V351 - A1	
C213 - H5	C328 - F7	C613 - D4	C722 - A3	L552 - B3	R550 - B3	V500 - B3	
C214 - H5	C330 - A4	C614 - D3	C723 - C3	L700 - C3	R551 - B3	V550 - B3	
C215 - H5	C331 - A4	C615 - D4	C724 - B2	L701 - C2	R558 - B3	V660 - E4	

